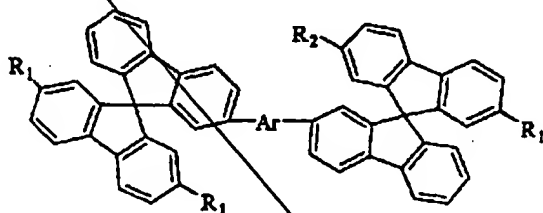


What is claimed is:

1. A blue electroluminescence compound for an electroluminescence display device comprising a spirobifluorene represented in a following formula 1:

formula 1



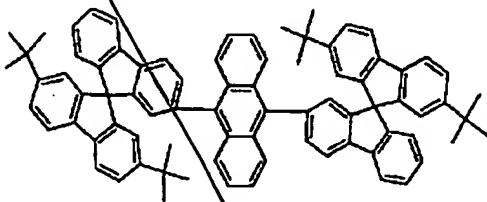
wherein the Ar is a functional group selected from the group consisting of an aryl group having 6 to 20 carbons, an aryl group of 6 to 20 carbons having a 1 to 20 alkyl functional group, and an aryl group of 6 to 20 carbons having a 1 to 20 alkoxy group, and the R₁ and R₂ each is a functional group selected from the group consisting of an alkyl group having 1 to 20 carbons, an aryl group of 6 to 20 carbons having an alkyl group of 1 to 20 carbons, and an aryl group of 6 to 20 carbons having an alkoxy group of 1 to 20 carbons.

2. The blue electroluminescence compound of claim 1, wherein the Ar is a functional group selected from the group consisting of anthracene, naphthalene, and a phenyl group in the formula 1:

3. The blue electroluminescence compound of claim 1, wherein each of the R₁ and R₂ is a t-butyl group in the formula 1.

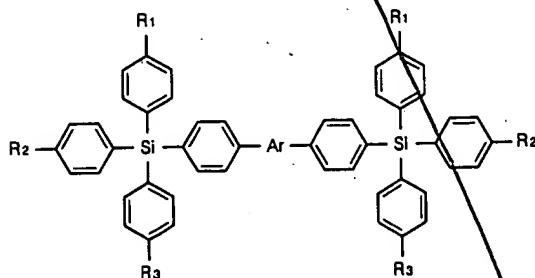
4. The blue electroluminescence compound of claim 1, wherein the electroluminescence compound is a compound represented in a following formula 3:

formula 3



5. A blue electroluminescence compound for an electroluminescence display device comprising a triarylsilylphenyl represented in a following formula 4:

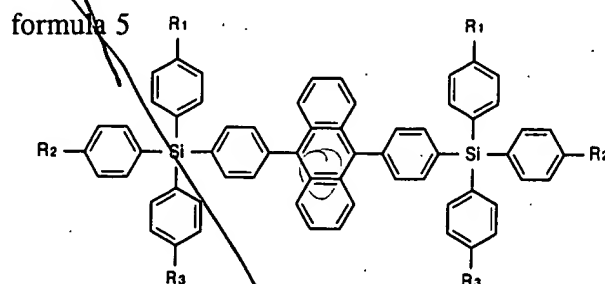
formula 4



wherein the Ar is a functional group selected from the group consisting of an aryl group having 6 to 20 carbons, an aryl group of 6 to 20 carbons having an alkyl group of 1 to 20 carbons, and an aryl group of 6 to 20 carbons having an alkoxy group of 1 to 20 carbons, and the R₁, R₂, and R₃ each is a functional group selected from the group consisting of H, an alkyl group of 1 to 20 carbons, an aryl group of 6 to 20 carbons having an alkyl group of 1 to 20 carbons, and an aryl group of 6 to 20 carbons having an alkoxy group of 1 to 20 carbons.

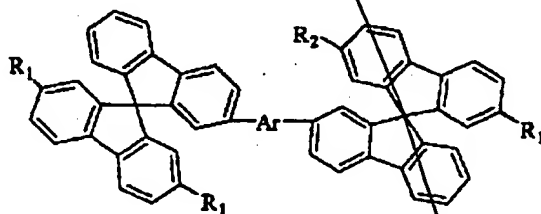
6. The blue electroluminescence compound of claim 5, wherein the Ar is one of anthracene and naphthalene.

7. The blue electroluminescence compound of claim 5, wherein the blue electroluminescence compound is a compound represented in a following formula 5:



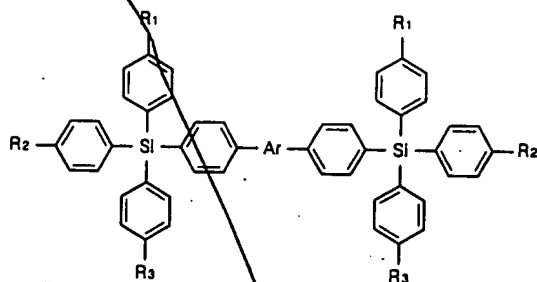
8. An organic electroluminescence display device comprising:
an organic layer between a pair of electrodes, wherein the organic layer comprises a compound represented in a following formula 1 or 4:

formula 1



wherein an Ar is a functional group selected from the group consisting of an aryl group having 6 to 20 carbons, an aryl group of 6 to 20 carbons having a 1 to 20 alkyl functional group, and an aryl group of 6 to 20 carbons having a 1 to 20 alkoxy group, and the R₁ and R₂ each is a functional group selected from the group consisting of an alkyl group having 1 to 20 carbons, an aryl group of 6 to 20 carbons having an alkyl group of 1 to 20 carbons, and an aryl group of 6 to 20 carbons having an alkoxy group of 1 to 20 carbons; and

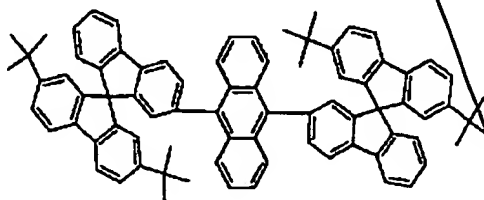
formula 4



wherein the Ar is a functional group selected from the group consisting of an aryl group having 6 to 20 carbons, an aryl group of 6 to 20 carbons having an alkyl group of 1 to 20 carbons, and an aryl group of 6 to 20 carbons having an alkoxy group of 1 to 20 carbons, and the R₁, R₂, and R₃ each is a functional group selected from the group consisting of H, an alkyl group of 1 to 20 carbons, an aryl group of 6 to 20 carbons having an alkyl group of 1 to 20 carbons and an aryl group of 6 to 20 carbons having an alkoxy group of 1 to 20 carbons.

9. The organic electroluminescence display device of claim 8, wherein the compound is a compound represented in a following formula 3:

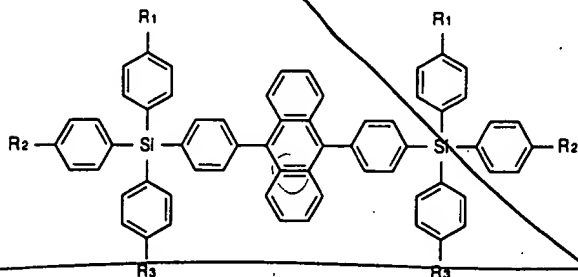
formula 3



Sub B3 cont.

10. The organic electroluminescence display device of claim 8, wherein the compound is a compound represented in a following formula 5:

formula 5



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11. An organic electroluminescence compound comprising:
an aryl group; and
spirofluorene groups.

12. The organic electroluminescence compound of claim 11, wherein the spirofluorene groups are perpendicular to each other.

Sub B3

13. The organic electroluminescence compound of claim 11, wherein the aryl group comprises anthracene, and the spirofluorene groups and the anthracene are hindered sterically, and each of the spirofluorene groups and the anthracene are distorted.

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14. The organic electroluminescence compound of claim 11, further comprising t-butyl.

Sub B3

15. An organic electroluminescence compound comprising:
an aryl group; and
triarylsilphenyl groups.

16. The organic electroluminescence compound of claim 15, wherein the triarylsilphenyl groups are distorted.

Sub B3
cont

~~17. The organic electroluminescence compound of claim 15, wherein the organic electroluminescence compound does not have an alkyl group.~~

App

~~18. An organic electroluminescence display device comprising:
a pair of electrodes; and
an organic layer formed between the pair of electrodes, the organic layer comprising a material formed of:
an aryl group, and
spirofluorene groups.~~

~~19. The organic electroluminescence display device of claim 18, wherein the spirofluorene groups are perpendicular to each other.~~

Sub B3

~~20. The organic electroluminescence display device of claim 18, wherein the aryl group comprises anthracene, and the spirofluorene groups and the anthracene are hindered sterically, and each of the spirofluorene groups and the anthracene is twisted.~~

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~~21. The organic electroluminescence display device of claim 18, further comprising t-butyl.~~

Sub B3

~~22. An organic electroluminescence display device comprising:
a pair of electrodes; and
an organic layer formed between the pair of electrodes, the organic layer comprising a material formed of:
an aryl group; and
triarylsilphenyl groups.~~

~~23. The organic electroluminescence display device of claim 22, wherein the triarylsilphenyl groups are distorted.~~

